

Bad drying result with dishwashers

Before the after-sales service visits the customer it is required that the order acceptance finds out by questioning whether the drying result is normal or really faulty.

A normal drying result is:

- There is a thin moisture film on the inner door and on the interior walls of the dishwasher, which however gets dry visibly after a short time. In this connection, some humid air is still escaping from the dishwasher.
- In case of dishwashers with the best drying result the drying effect is marked with an A on the energy label. That means that at least 93 % of the dishes must be dry.
- Plates, cups, dishes and pots dry in general very good.
- The glasses still may have some water drops at the points of contact to the basket.
- There is water in hollows in which the water cannot drain from the dishes.
- There may be water drops at the points of contact with cutlery items.
- Plastic dishes in general dry badly. It is necessary to dry by hand with a tea-cloth afterwards.

The use of 3-in-1 products, that is detergent tabs which include softener, detergent and rinse-aid, could also be the reason.

The customer should try common detergents and rinse-aid or should call the hotline of the producer of the cleaning agent.

When the technician is checking the dishwasher, he can relate the drying result to two fault pattern.

1. The dishwasher is drying but the customer is generally unsatisfied with the drying result.

Check and measures

- *Is the fan running?*
"Trick" the door contact with a separate lock bow and switch on the fan via the service function. Hold your hand or a lighter in front of the water hardness regulator: a smooth air flow must be perceptible.
- *Is the detergent and rinse-aid dosage tight?*
In case of leaky detergent and rinse-aid dosages the provided quantity of rinse-aid is no more available for the final rinse cycle. Open the dishwasher until the door is in horizontal position and wait approx. 30 seconds.
In case of new detergent and rinse-aid dosages with a rinse-aid cover: On this occasion open the rinse-aid cover. Check the sealing in the cover for a correct seat. Also check whether the counterpart has left a mark on the sealing as a continuous line. Wipe off rinse-aid remains at the fill-in opening with a cloth until the fill-in area is dry. Then put the door **slowly** almost vertical. (rinse-aid cover still open). Rinse-aid must not leak out of the fill-in opening.

On former detergent dispensers with a round rinsing agent filling aperture keep this aperture closed, then place the door to an almost vertical position. Rinse-aid must not leak out of the fill-in opening.

Old and new detergent and rinse-aid dosage, door almost vertical, door contact "tricked" with a separate lock bow. Select the detergent and rinse-aid dosage **once** via the service function and wait 2 minutes. If the rinse-aid is leaking out of the dosage opening, then the detergent and rinse-aid dosage is leaky internally.

A leaking detergent and rinse-aid dosage has to be replaced completely.

- *Is the rinse-aid dosage adjusted optimally?*
An increase favours the drying result.
- *Is the final rinse temperature correct?*
With the control classes EDW 1500 , EDW 1503, EDW 2000 with turbidity sensor and automatic program the maximum final rinse temperature is 67 °C. From S-No. 336 ... onward these appliances are produced with a modified electronic "final rinse temperature 69 °C". This improves the drying result with that the glass corrosion increases. The critical temperature, in case of which the glass corrosion starts to an increasing extent, is > 71 °C.

Until S-No. 336 ... it is possible to raise the final rinse temperature by 2 °K and improve the drying result using a service sensor, P-No. 111 144 000/2. In addition inform the customer which has to be expected by a normal drying result. Insert especially plastic dishes inclined so that the water can run off.

When using 30-minutes cycle, glass cycle or energy-saving cycle, the final rinse temperature is below 69 °C. According to that, the drying result is confined too. Inform the customer even in this connection that a good washing and drying can only be achieved when using an adequate powerful program.

2. **The dishwasher does not dry or only very bad. The appliance is very wet, the walls are spread with large drops and/or the dishes are cold at the end of the program.**

Checks and measures

- *Is the appliance built in high?*
Are there only complaints about energy-saving cycle and glass cycle?

A cause is an only partial drain in these cycles. In case of a high built-in dishwasher a siphon effect arises and the appliance is running empty. The consequence is: no level, no heating, no rinse-aid dosage.

As measure use the high built-in assembly.
- Does the fault memory indicate **FO** or **i10** resp. depending on the electronic the fault code for "water tap closed" or "filling time fault" ?
Maybe there is not sufficient water in the final rinse cycle. The consequence is; no heating, no rinse-aid dosage. Check the sieve at the inlet hose, clean it and check the inlet speed. The static level must be reached after about 30 seconds and the pressure switch clicks.
- *Is rinse-aid filled in?*
- *Does the reed switch for the display of a lacking rinse-aid work?*
- *Is the rinse-aid dosage switched on?*

- *Does the detergent and rinse-aid dosage work?*
Open the door and wait 30 seconds. Then close the door and select the dosage device twice via the service function.
(select 60 seconds, 60 seconds pause, select 60 seconds)

Open the door and see whether rinse-aid was dosed. Afterwards wipe off again the rinse-aid and check the sealing as described in fault pattern 1.